

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF US 40 AND CHESAPEAKE BOULEVARD IN CECEIL COUNTY. US 40 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA THREE-PHASE, FULL-TRAFFIC-ACTUATED MODE.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH (1) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIER AND ONE VIDEO DETECTION CAMERA HOUSED IN A NEMA "6" BASE MOUNTED CABINET. THIS INTERSECTION WILL BE INTERCONNECTED TO THE EXISTING TRAFFIC SIGNAL AT US 40 AND MD 781.

SPECIAL NOTE

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF THE MSHA AT (410) 787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR MUST PROVIDE MR. SYNDER WITH THE NEAREST ADDRESS, ZIP CODE, AND PHONE NUMBER.

PHASE CHART

	1	2	3	4	5	6
	(R)	(R)	(R)	(R)	(R)	(R)
	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)
	(G)	(G)	(G)	(G)	(G)	(G)
PHASE 2 & 6	G	G	G	G	R	R
2 & 6 CHANGE	Y	Y	Y	Y	R	R
PHASE 4	R	R	R	R	G	G
4 CHANGE	R	R	R	R	Y	Y
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R

EQUIPMENT LIST "A"

A. APPROVED SHA EQUIPMENT TO BE PURCHASED BY THE DEVELOPER AND INSTALLED BY THE CONTRACTOR. ALL EQUIPMENT IN THIS LIST SHALL HAVE CATALOG CUTS SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

CONTACT PERSONS FOR DISTRICT 2 ARE AS FOLLOWS:

MR. ROBERT KIEL
ASSISTANT DISTRICT ENGINEER - TRAFFIC
(410) 778-3061

MR. TERRY WRIGHT
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(410) 778-3061

MR. BARRY CLOTHIER
ASSISTANT DISTRICT ENGINEER - UTILITIES
(410) 778-3061

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF, SR.
CHIEF, TRAFFIC OPERATIONS
(410) 787-7630

MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
(410) 787-7676

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF,
TRAFFIC OPERATIONS
(410) 787-7631

MS. DARLENE EIDE
SUPPLY OFFICE
SIGNAL SHOP WAREHOUSE
(410) 787-7668

MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
(410) 787-7652

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR
ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO DOTS FOR APPROVAL PRIOR TO INSTALLATION.

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
2002	3 EA	TEST PIT EXCAVATION
5005	85 LF	FURNISH AND INSTALL 24 IN. WHITE HEAT APPLIED PERMANENT
8001	1 EA	FURNISH AND INSTALL 250 FT. VIDEO CABLE TO CONTROLLER
8006	1 EA	CUT, CLEAN, AND CAP TRAFFIC SIGNAL STRUCTURE
8011	18 EA	FURNISH AND INSTALL 12 IN. VEHICULAR SIGNAL HEAD SECTION
8013	2 EA	FURNISH AND INSTALL 15 FT. STREET LIGHTING ARM FOR SIGNAL POLE
8014	2 EA	FURNISH AND INSTALL 250 WATT HPSV LUMINAIRE
8020	1 EA	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT FOR SIGNAL
8035	1 EA	* FURNISH AND INSTALL 50 FT./70 FT. TWIN MAST ARMS AND POLE
8035	1 EA	FURNISH AND INSTALL 50 FT./70 FT. TWIN MAST ARMS AND POLE
8043	4 EA	FURNISH AND INSTALL NGN INVASIVE PROBE WITH 1000 FT. LEAD-IN
8049	1 EA	FURNISH AND INSTALL VIDEO DETECTION CAMERA
8050	1 EA	FURNISH AND INSTALL VIDEO INTERFACE EQUIPMENT
8052	240 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - BORED
8053	500 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
8057	12 CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
8058	218 LF	FURNISH AND INSTALL 4 IN. X 4 IN. WOOD SUPPORT
8059	240 LF	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER WIRE
8064	60 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - BORED
8070	50 LF	FURNISH AND INSTALL ELECTRICAL CABLE 1-CONDUCTOR NO.4 AWG
8072	11 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8076	800 LF	FURNISH AND INSTALL 12-PAIR COMMUNICATION CABLE UNDERGROUND
8080	3 EA	FURNISH AND INSTALL GROUND ROD 3/4 IN. DIAMETER X 10 FT. LENGTH
8084	70 LF	FURNISH AND INSTALL ELECTRICAL CABLE 5-CONDUCTOR NO. 14 AWG
8085	810 LF	FURNISH AND INSTALL ELECTRICAL CABLE 7-CONDUCTOR NO. 14 AWG
8086	460 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR NO. 12 AWG
8086	430 LF	FURNISH AND INSTALL SAW CUT FOR LOOP DETECTOR
8088	40 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
8051	410 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
8093	1 EA	FURNISH AND INSTALL CONTROLLER AND CABINET BASE MOUNT
---	1 EA	FURNISH AND INSTALL 4-CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIER
---	2 EA	FURNISH AND INSTALL D3-1 SINGLE FACED SIGN "CHESAPEAKE BLVD" (VAR. X 16") MAST ARM MOUNT
---	1 EA	FURNISH AND INSTALL M95-1 SIGN (72" X 24") MAST ARM MOUNT
---	5 EA	FURNISH AND INSTALL W3-3 SIGN (48" X 48") WITH "NEW" PANEL (30" X 30") AND FLAGS - GROUND MOUNT
---	1 EA	FURNISH AND INSTALL R3-1 SIGN (30" X 30") MAST ARM MOUNT
---	250 SF	FURNISH AND INSTALL HOT MIX ASPHALT
6002	140 LF	FURNISH AND INSTALL STANDARD TYPE 'A' COMBINATION CURB AND GUTTER

* THE 70 FT. MAST ARM FOR THE SOUTHBOUND TRAFFIC ON KIRSTEN COURT WILL BE FURNISHED AND INSTALLED BY OTHERS. INSTALL FLANGE PLATE COVER.

EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

ITEM NO.	QUANTITY	DESCRIPTION
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NONE

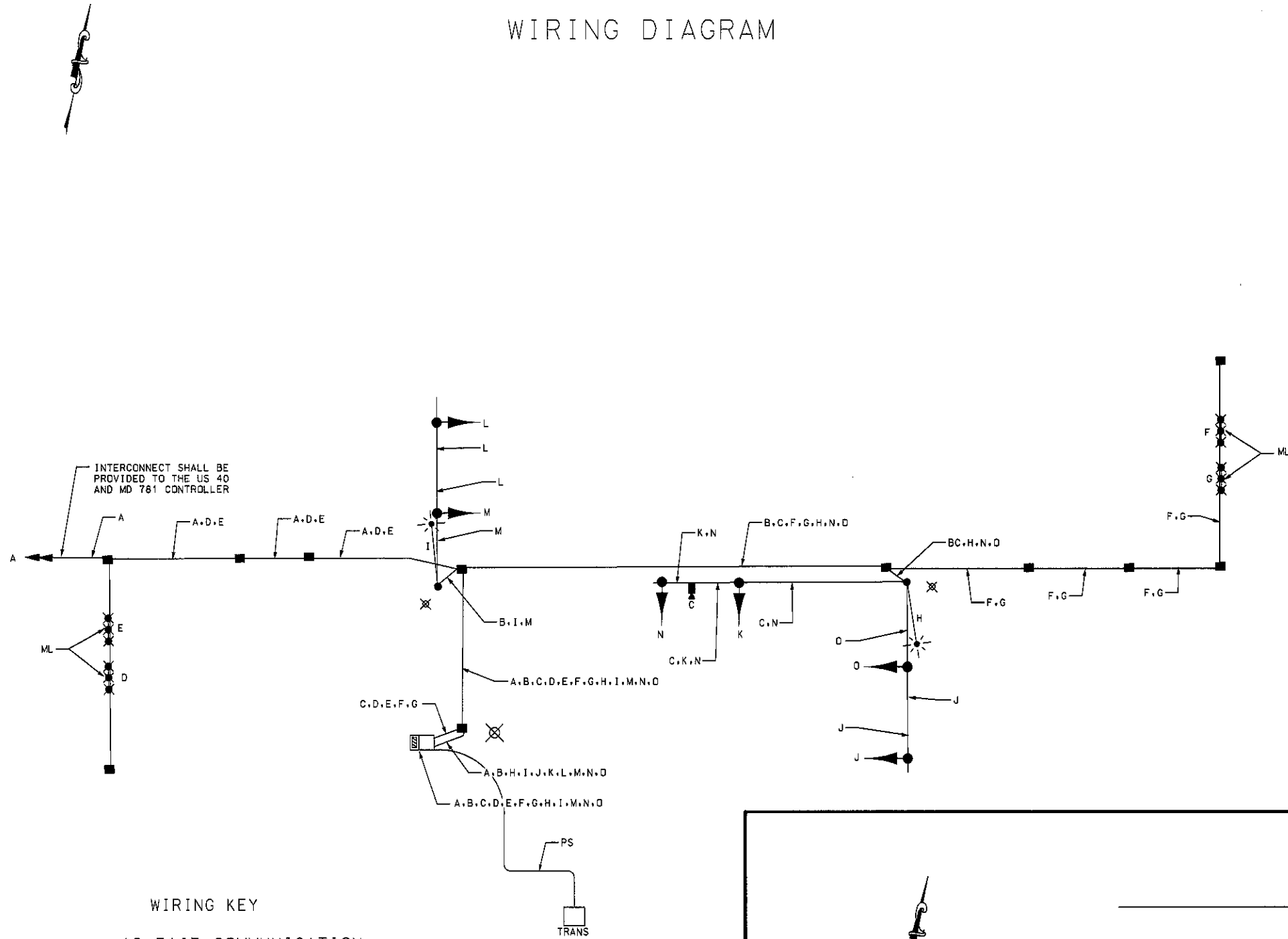
ALL SIGNAL EQUIPMENT TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION
US 40 AT CHESAPEAKE BOULEVARD

DRAWN BY:	M.HOWELL	F.A.P. NO.	N / A	TS NO.	4319 GI	SHEET NO.	
CHECKED BY:	T.ZAYDEL	S.H.A. NO.	B / W	T.I.M.S. NO.	G 334	2	OF 2
SCALE:	NONE	COUNTY:	CECIL	LOG MILE:	07004017.17		
DATE:	3-18-04						

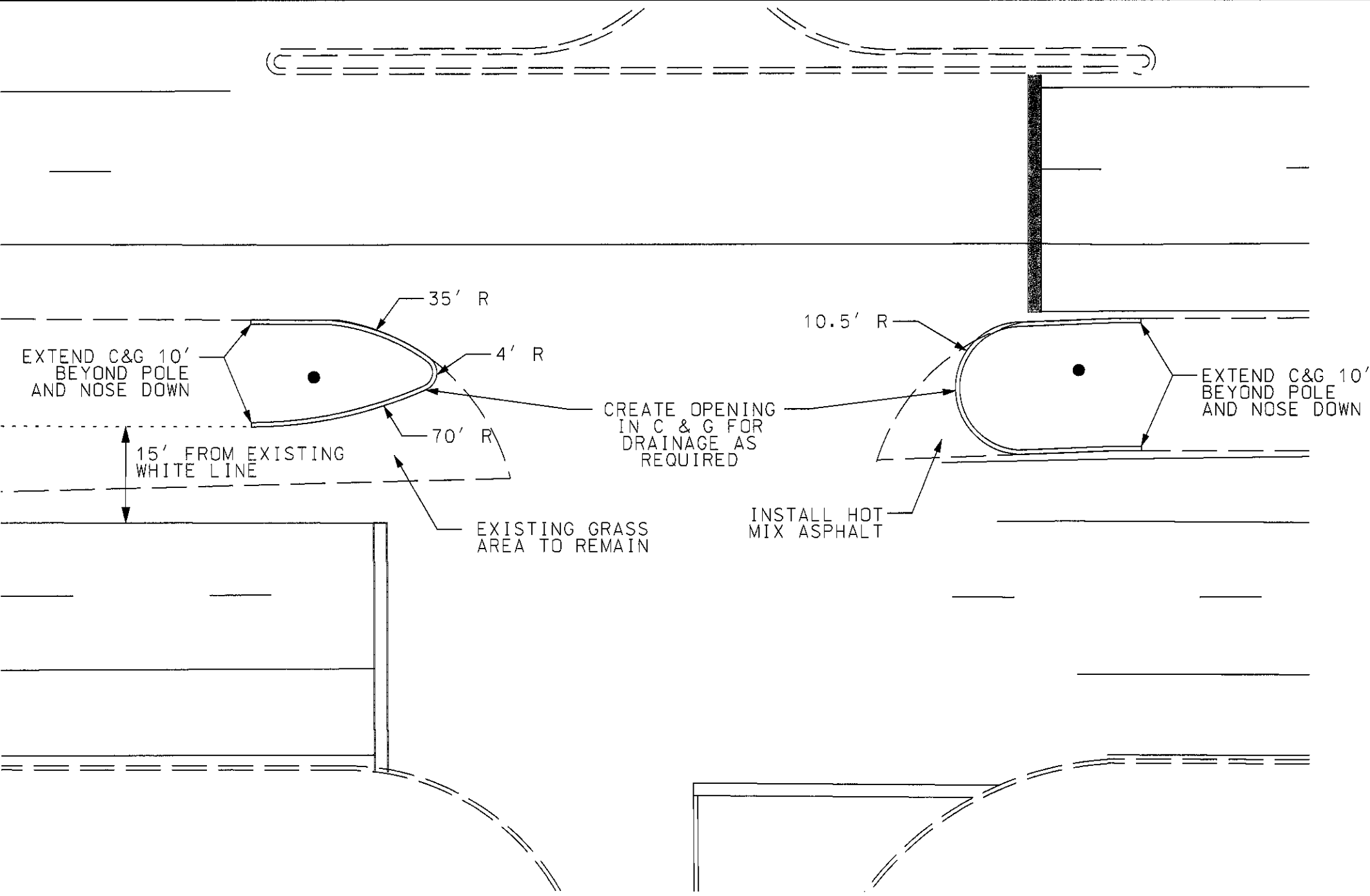
WIRING DIAGRAM



WIRING KEY

- A 12-PAIR COMMUNICATION CABLE, JELLY FILLED UNDERGROUND
- B STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- C VIDEO DETECTION 250 FT. PREMANUFACTURED CABLE
- D-G MICRO-LOOP PROBE
- H-I 2 CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)
- J-L 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- M-O 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- ML MICRO-LOOP PROBE
- PS PROPOSED UNDERGROUND ELECTRIC SERVICE
- X GROUND ROD

CURB & GUTTER INSTALLATION DETAIL



NOTE: CURB & GUTTER AND HOT MIX ASPHALT SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER

TRAFFIC CONCEPTS, INC.
325 Gambrills Road
Suite E
Gambrills, MD 21054
(410) 923-7101

FAX (410) 923-6473 EMAIL TRAICONCEPT@AOL.COM